

Chapter 6: Data Entry

Data entry allows you to create records by keying values into data fields. A Data Entry import session can be used to key data that you are viewing on paper forms. Image Data Entry tasks allow you to key data that you are reading from an image file displayed on your monitor.

A record created via data entry follows the workflow defined for its record type. The same workflow is used for records created in data entry and records loaded from import files. Registry managers should define guidelines for data entry; in particular, managers should identify the fields that must be entered for each record type. Record edits should be created to enforce the guidelines.


In this chapter, you'll learn about

- Standard Data Entry Sessions
- Image Data Entry Tasks
- Using the Record Editor
- Entering Values for the Data Fields
- Keyboard Functions for Data Entry
- Printing a Record in SEER*DMS
- Clearing Unsaved Data
- Reports Related to Data Entry

Standard Data Entry Sessions

Requires system permission: *import_manual* and *contact_view* and *rec_edit*

To start a data entry session:

1. Select **System > Imports & Data Entry**.
2. Select **Actions > New Data Entry**.
3. Use the  lookup for the **Facility** field to specify the facility that provided the data. You may enter a set of records from one import facility during a single data entry session. If you will be entering data from multiple facilities then you may use a generic import facility. For example, some registries use the registry's ID.
4. You have the option of specifying a **Contact** at that facility. This field is not required.
5. You may enter notes regarding the import in the **Comments** field.
6. Click **Next**.

Follow the instructions in the *Using the Record Editor* section of this chapter to complete the data entry session. As each record is saved, SEER*DMS will assign a unique record ID and forward the record to the initial processing tasks in the workflow.

If you scanned documents into a file and would like to attach them to the record:

1. Click **Img** in the left navigation panel of the record editor.
2. Click **Add**.
3. Select the first **Browse** button and locate the image file on your computer or network.
4. You have the option of specifying a **Type** and adding a **Comment**.
5. Click **Add**. The image will not be saved with the record until the record itself is saved.

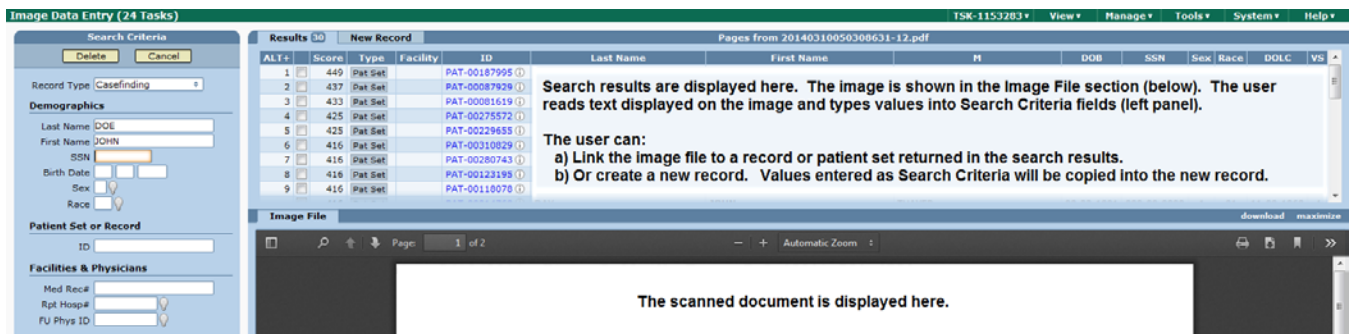
Image Data Entry Tasks

Requires system permission: *rec_edit*

An image file is a file that contains graphics data, for example, a PDF, GIF, or PNG file. The image files in SEER*DMS are typically created by scanning paper copies of pathology reports, death certificates, or other documents. You may attach an image to any record or patient set in SEER*DMS using the **Img** page of the editor, but you should use Image Data Entry tasks to process batches of image files when each file will be linked to a separate record or patient set.

Image data entry tasks can only be created by autoloading image files. A task is created for each image file.

The image is displayed in the task and, as you view the image, you may a) attach the image to an existing record or patient set; or b) create a new record after entering data in the fields required by your registry. This screen shot shows the user interface for Image Data Entry tasks.



To complete an Image Data Entry Task:

1. View the graphics data displayed in the **Image File** section. All Image Files are converted to PDF for display purposes. Standard PDF controls are available to scroll, zoom, rotate, etc. The Image File is displayed within your web browser, therefore, the style and location of the PDF controls will vary from one browser to another.
2. Enter values into the **Search Criteria** data fields on the left side of the screen. As you move from one field to another, SEER*DMS will search the database to see if there are other data for the patient.
3. You will use one of the two options described below to complete the task. Determine which option is appropriate based on the content of the image file and your registry's policies.
 - a. **Link the image file to a record or patient set returned in the search results.** Use this option when the image file provides documentation for an existing record or CTC. This should only be done when workflow processing is not needed for the image. For example, some registries receive paper copies of death certificates. The paper death certificates may contain more information than the death certificate records loaded from data files. Each scanned death certificate is linked to a death certificate record in the database.

To link the image file to one of the items in the Results:

- i. Press the **Alt key plus the row number** to select an item; or use your mouse to check the box for the item.
- ii. Set the **Image Type** and enter a **Comment**. These are not required by all registries. You may use the tab key to move from one field to the next or you may use your mouse.

- iii. Select either Patient Set or a CTC in the **Link to** drop down menu.
 - iv. Click **Link** or tab to the Link button and press the Enter key.
- b. **Create a new record.** For example, you would create a new record for a paper pathology report that is new information. The new record will move into the workflow and may be used to create a new case.
- Optional: Enter data values into fields in the left panel (Search Criteria section). Values that you enter will be copied into the new record. Typically, all of the fields that you need to enter will be listed in this section. Ask your registry manager which fields are required. Registries may create edits so that required fields are highlighted.
- i. Click the New Record tab or type Alt+N.
 - ii. Set the Image Type and enter a Comment. These are not required by all registries.
 - iii. If you have entered all fields required by your registry, click Save New Record. If your registry requires you to enter additional fields, then click Edit New Record and the full record editor will be opened. The image itself will be displayed in the record editor. Note: You must use Edit New Record to create a second record for the same image. You will have the option when you save the first record in the full editor.

Note: Registry policies determine which fields must be entered in an Image Data Entry task. Typically, these are fields that are either used to match an incoming record to patient sets and records in the database, or are required to determine reportability.
 - iv. When you save the new record, SEER*DMS will assign a unique record ID and forward the record to the initial processing tasks in the workflow.
4. The next Image Data Entry task will automatically open. SEER*DMS will open the next task that was listed in the worklist when you opened the first task. A task will only be opened if it was unassigned or assigned to you. This allows you to work through a large number of tasks without returning to the worklist.
5. If you do not want to complete a task, you may:
- a. Skip to the next task by pressing **Alt+K** or selecting **Skip** from the Task menu. The task that you skipped will still be assigned to your account.
 - b. Cancel (use **Cancel** button at the top of the Search Criteria section). This will end your Image Data Entry session. The last task will be assigned to your account.
 - c. Release or Reassign the task using the Task menu. This will end your Image Data Entry session.

Key points related to Image Data Entry tasks:

- A standard SEER*DMS matching algorithm is used for the search. To view the matching criteria while completing an Image Data Entry task, click **View Search Criteria** at the bottom of the Search Criteria section. The matching algorithm is also documented on the SEER*DMS Matching help page (go to Help > Matching and view Image Linkage).
- Each registry may specify which fields are listed in the Search Criteria section. One list is used for all record types, but a field is only shown for a record type if it is also shown in the full editor. To request a change to the list of fields, please submit an issue in the SEER*DMS Technical Support Squish project.

Using the Record Editor

After initiating the data entry session as described in the previous section, SEER*DMS will display a record editor similar to the one shown below.

The screenshot shows the SEER*DMS Record Editor interface. On the left, there is a 'Record Navigation Box' with a 'Demographics' link highlighted. Below it is an 'Info' box with fields for 'Import ID', 'Import Type', 'Source', and 'Record Type'. The main body of the form contains various data entry fields for demographics, follow-up, current address, and follow-up contacts. Callout boxes highlight the 'Record Navigation Box' and the main data entry area.

Use the links in the **Record Navigation Box** to access each page of record data. The number of pages and the layout of the fields in the body of each page vary by record type.

The following items are displayed in the **Info Box** during a data entry session:


- **Import ID** – A unique identifier assigned to all records entered in the same data entry session or imported in the same set of files. An Import ID will be assigned when you save the first record in a data entry session. The Import ID can be used to generate reports listing records entered during a data entry session (see *Reports Related to Data Entry*).
- **Import Type** – Data Entry.
- **Source** – The facility specified as the source of the data.
- **Record Type** – A drop-down list of the types of records that can be entered manually.

The **body** of the record editor displays the content for the currently selected page. The layout of the fields in the body of the page varies by record type. The NAACCR record type is consistent in all registry configurations; other record types vary. A variety of controls are used on the data pages to edit specific fields; these are described in the *Entering Values for the Data Fields* section of this chapter.

Entering Values for the Data Fields

Requires system permission: *import_manual* and *contact_view* and *rec_edit*

To enter values for the data fields:

1. Select the appropriate **Record Type** from the drop-down list provided in the **Info** box on the left side of the screen.
2. The editor displays data fields in different colors to highlight fields that generated an error based on SEER and local edits. At this point, errors may be indicated for missing data fields. You should limit your attention to entering the raw data provided on the paper records; errors should be addressed during visual editing tasks. *Chapter 7: Edit Errors* contains more information on the edits and the color codes used in the record editor.
3. Enter values for all data fields provided on the paper record:
 - a. Enter data into the fields on the current page. You may use your mouse or keyboard controls to move from field to field.
 - b. You may enter text directly into fields; for some fields you may use a lookup  to select a value from a list. See the *Keyboard Functions for Data Entry* section of this chapter for more information.
 - c. If entering data for a record with multiple pages, use the links in the Record Navigation Box to move between pages.
 - d. If the paper record does not provide a value for a field, leave the field blank.
4. If you mistakenly enter data for a record that you do not want to save, you may clear the data entry pages. For instance, you may use this feature if you realize that you are entering data for a record that you previously entered. Refer to the *Clearing Unsaved Data* section of this chapter for instructions.
5. Click **Save** when you have entered all available data for the record.
6. Enter a **Comment** regarding the data entry session, if appropriate. Your comment will be accessible on this record's Audit Log page in all subsequent tasks.
7. Click **Save & Exit** to complete data entry for this record. A record ID will be assigned and displayed at the top of the page.
8. Enter data for the next record on the blank data entry screen that is displayed. Repeat data entry steps until all records are entered. You may enter data for different record types during a single data entry session.
9. After the last record has been entered and saved, click **Cancel** to end the data entry session.


Keyboard Functions for Data Entry

The table below lists keyboard functions that can be used to modify fields in the editor.

Use your mouse to go directly to a field or use the following keystrokes:

Use	To
Tab	Go to the next field
Shift + Tab	Go to the previous field

To edit a data field, type the new value into the text box or use the following controls:

Use	To
Click 	Open a lookup table to select a value from a list of the field's valid values. For some lookups, you will also be able to define new values (e.g., add a new physician or facility).
Ctrl + A	Select all text (highlight without using the mouse)
Ctrl + C	Copy to clipboard
Ctrl + X	Cut – deletes highlighted text and copies it to the clipboard
Ctrl + V	Paste from clipboard to cursor location
Ctrl + Z	Undo changes made in a field.
Ctrl + Y	“Redo” changes. This reverses changes made by Ctrl + Z.
Home and End	Go to beginning or end of current field

Press F1 to view the keyboard shortcuts available on any screen. The keyboard shortcuts specific to the record editor are shown below.

Use	To
Alt + S	Save
Alt + E	Save & Exit
Alt + C	Cancel
Alt + P	Print
Alt + U	Undo Changes
Alt + V	Validate
Alt + T	Open the Text popup
Alt + I	View Field Information for the current field
Alt + L	Open the lookup for the current field

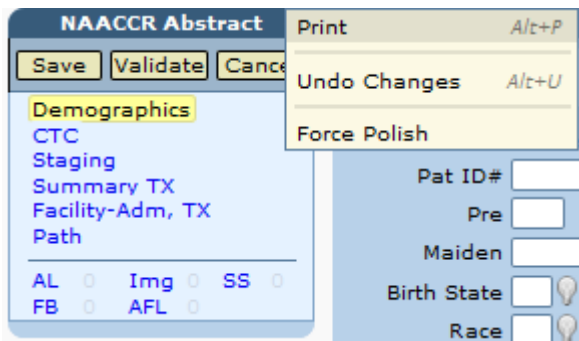
Printing a Record in SEER*DMS

Requires system permission: *rec_print*; *rec_read_only* or *rec_edit*

Select print from the record menu to open a printable version of the record. Fields from all pages of the record will be included. You may print a record during a data entry session, when a record is opened in the editor during a worklist task, or when an unlinked record is opened from the Patient Lookup. You may also print a linked record when it is viewed in the patient set editor.

To print a record:

1. Click the arrow in the Record Navigation Box to open the record menu:



2. Select **Print** or press ALT+P. A printable version will open in a new window.
3. Some record types have more than one data section. If you do not want to print a section, uncheck the box next to the section header.
4. Use the File menu in the report window to print the record.
5. Close the report window.

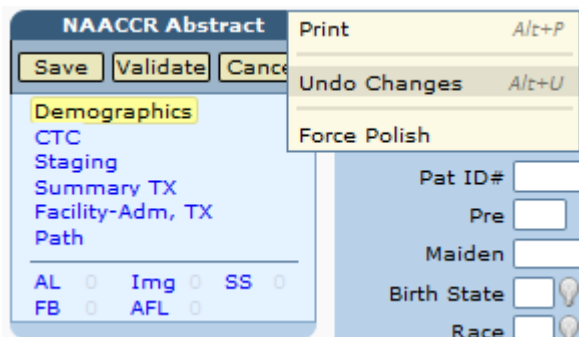
Clearing Unsaved Data

Requires system permission: *import_manual* and *rec_edit*

If you have mistakenly entered data for a record that you do not want to save, use the undo feature to clear the data entry pages. You may use this feature if you realize that you are entering data for a record that you previously entered.

To clear unsaved data:

1. Click the arrow in the Record Navigation Box to open the record menu:



2. Select **Undo Changes**.

Reports Related to Data Entry

In SEER*DMS, a data entry session is considered to be a single, manual import. Therefore, each record saved during a data entry session is assigned the same Import ID. The Import ID can be used to generate reports regarding imported data files or data entry sessions. System reports related to data imports are listed in the table below. If you require additional information regarding imported data, you may query the database using the record's Import ID or Date Loaded; or query fields stored in the *Submission_file* table. See *Chapter 24: Creating Reports and Extracting Data* for further instructions; refer to the *SEER*DMS Data Dictionary* for information related to the database tables.

Report ID	Title	Description
RPT-008A	Status of Imported Records	This report shows the current status of each record in an import.
RPT-009A	Imported Records	A listing of records in a specific import or records imported on a specific date.
RPT-061A	Workflow Location of Imported Records	For each imported record, this report lists the current location of the record in the workflow.
RPT-070A	Import Summary	Filenames, number of records, and comments for imports in a specified time period.
RPT-084A	Summary of Data Entry and Ad hoc Editing	The number of records and patient sets imported via data entry and modified via ad hoc editing. This report shows frequencies by user for a specified time period.